



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: **YANAGISAWA, Katsuhiko, et al.**

Group Art Unit: **1646**

Serial No.: **10/768,193**

Examiner: **To Be Assigned**

Filed: **February 2, 2004**

P.T.O. Confirmation No.: **3691**

For: **ANTIBODY RECOGNIZING GM1 GANGLIOSIDE-BOUND AMYLOID  $\beta$ -PROTEIN AND DNA ENCODING THE ANTIBODY**

**INFORMATION DISCLOSURE STATEMENT**  
**PURSUANT TO 37 CFR 1.97(b)**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

April 29, 2004

Sir:

The attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached Form PTO-1449. One copy of each of these documents is attached.

All of references, except references 1 and 19, are discussed in the specification of the Application No. 10/768,193.

References 20 and 21, for which only a Japanese language copy is provided, relate to the background of the invention.

No fee or certification is required in connection with this Information Disclosure Statement, since it is being submitted prior to the issuance of a first official action on the merits or expiration of the three month period following the filing date or the entry of the national stage of the above-captioned application.

The above information is presented so that the Patent and Trademark Office can, in the first instance, determine any materiality thereof to the claimed invention. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the

documents cited in the attached Form PTO-1449 be made of record therein and appear on the first page of any patent to issue therefrom.

The Commissioner is authorized to charge our Deposit Account No. 01-2340 for any fee which is deemed by the Patent and Trademark Office to be required to effect consideration of this statement.

Respectfully submitted,

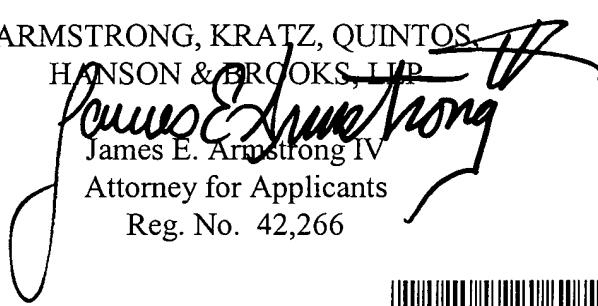
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**23850**

PATENT TRADEMARK OFFICE

Enclosures: PTO-1449 and references (21)

INFORMATION  
DISCLOSURE  
CITATION  
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Atty. Docket No. 040036

Serial No. 10/768,193

Applicant(s): YANAGISAWA, Katsuhiko, et al.

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Filing Date: February 2, 2004

Group Art Unit: 1646

U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Name	Date	Class	Subclass	Filing Date (If appropriate)

FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Translation (Yes or No)
1	WO 90/07861	07/26/90	WO	

OTHER DOCUMENTS

2	Yanagisawa et al., "GM1 Ganglioside-Bound Amyloid $\beta$ -Protein (A $\beta$ ): A Possible Form of Preamyloid in Alzheimer's Disease", <i>Nature Medicine</i> , Vol. 1, No. 10, pp. 1062-1066, 1995
3	Yanagisawa et al., "GM1 Ganglioside-Bound Amyloid $\beta$ -Protein in Alzheimer's Disease Brain", <i>Neurobiology of Aging</i> , Vol. 19, No. 1S, pp. S65-S67, 1998
4	Yanagisawa et al., "Amyloid $\beta$ -Protein (A $\beta$ ) Associated with Lipid Molecules: Immunoreactivity Distinct From that of Soluble A $\beta$ ", <i>FEBS Letters</i> 420 (1997) 43-46
5	McLaurin et al., "Membrane Disruption by Alzheimer $\beta$ -Amyloid Peptides Mediated...", <i>Journal of Biological Chemistry</i> , Vol. 271, No. 43, pp. 26482-26489, 1996
6	Choo-Smith et al., "The Interaction between Alzheimer Amyloid $\beta$ (1-40) Peptide and Ganglioside G <sub>M1</sub> -Containing Membranes", <i>FEBS Letters</i> 402 (1997) 95-98
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13	R.G. Parton, "Ultrastructural Localization of Gangliosides; GM <sub>1</sub> Is Concentrated in Caveolae", <i>Journal of Histochemistry and Cytochemistry</i> , Vol. 42, No. 2, pp. 155-166, 1994
14	Simons et al., "Functional Rafts in Cell Membranes", <i>Nature</i> Vol. 387, pp. 569-572, 1997
15	Lee et al., "A Detergent-Insoluble Membrane Compartment Contains A $\beta$ in Vivo", <i>Nature Medicine</i> , Vol. 4, No. 6, pp. 730-734, 1998
16	Morishima-Kawashima et al., "The Presence of Amyloid $\beta$ -Protein in the Detergent-Insoluble Membrane...", <i>Biochemistry</i> , Vol. 37, No. 44, pp. 15247-15253, 1998
17	Sawamura et al., "Mutant Presenilin 2 Transgenic Mice...", <i>Journal of Biological Chemistry</i> , Vol. 275, No. 36, pp. 27901-27908, 2000
18	Kim, et al., "Production and Characterization of Monoclonal Antibodies Reactive to Synthetic Cerebrovascular...", <i>Neuroscience Research Communications</i> Vol. 2, No. 3, pp. 121-130, 1988
19	Jones et al., "Replacing the Complementarity-Determining Regions in a Human Antibody with Those From a Mouse", <i>Nature</i> Vol. 321, No. 6069, pp. 522-525, 1986
20	Yanagisawa et al., <i>Internal Medicine</i> , Vol. 77, No. 5, pp. 797-803, 1996 (relates to the background of the invention)
21	Yanagisawa et al., <i>Journal of Clinical and Experimental Medicine</i> , IGAKU NO AYUMI, Vol. 189, No. 1, pp. 3-8, 1999 (relates to the background of the invention)

Examiner

Date Considered